

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please cancel claims 11-28 without prejudice.

Please add new claims 29-34.

Please amend claim 3 as indicated below (material to be inserted is in **bold** and underline, material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [ [ ]]):

**Listing of Claims:**

1. (Original) A method of controlling a dissolution rate of a bioactive agent, the method comprising:

applying a first drop of solution carrying the bioactive agent at a first selected location on a delivery substrate; and

positioning a second drop of solution carrying the bioactive agent at a second selected location on the delivery substrate, wherein the location of the first drop and the location of the second drop are selected based on a target dissolution rate.

2. (Original) The method of claim 1, wherein the first drop and the second drop at least partially overlap.

3. (Currently Amended) The method of claim 1, wherein the first drop and the second drop are spaced sufficiently to avoid coalescing.

4. (Original) The method of claim 1, wherein applying the first drop of solution and positioning the second drop of solution includes heating solution carrying the bioactive agent with a thermal ejection element.

Page 2 - AMENDMENT  
Serial No. 10/801,381  
HP Docket No. 200401494-1  
KH Docket No. HPCC 3C7

5. (Original) The method of claim 4, wherein the heated solution is applied via at least two nozzles sized to eject drops of solution having substantially the same volume.

6. (Original) The method of claim 1, wherein applying the first drop of solution and positioning the second drop of solution includes displacing the solution carrying the bioactive agent with a piezoelectric ejection element.

7. (Original) The method of claim 6, wherein the displaced solution is applied via at least two nozzles sized to eject drops of solution having substantially the same volume.

8. (Original) The method of claim 1, further comprising positioning a plurality of drops of solution carrying the bioactive agent, each at a location selected based on [[a target dissolution rate.

9. (Original) The method of claim 8, wherein a standard deviation of distance between adjacent drops is less than approximately 15% of a mean distance between adjacent drops.

10. (Original) The method of claim 8, wherein a standard deviation of combined geometric surface area of overlapping drops is less than approximately 15% of a mean combined geometric surface area of overlapping drops.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

Page 3 - AMENDMENT  
Serial No. 10/801,381  
HP Docket No. 200401494-1  
KH Docket No. HPCC 3C7

17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. (Cancelled)
21. (Cancelled)
22. (Cancelled)
23. (Cancelled)
24. (Cancelled)
25. (Cancelled)
26. (Cancelled)
27. (Cancelled)
28. (Cancelled)
29. (New) A method of controlling a dissolution rate of a bioactive agent, the method comprising:
  - applying a first drop of solution carrying the bioactive agent at a first location on a delivery substrate;
  - selecting a second location on the delivery substrate for placement of a second drop of solution carrying the bioactive agent, the second location being selected in relation to the first location based on a target dissolution rate; and
  - positioning the second drop of solution at the selected second location on the delivery substrate.
30. (New) The method of claim 29, wherein positioning the second drop effects a dot pattern with at least one dot at least partially overlapping with at least one other dot.

Page 4 - AMENDMENT  
Serial No. 10/801,381  
HP Docket No. 200401494-1  
KH Docket No. HPCC 3C7

31. (New) The method of claim 29, wherein positioning the second drop effects a dot pattern with at least one of the dot fully overlapping with at least one other dot.

32. (New) The method of claim 29, wherein positioning the second drop effects a dot pattern with each dot discretely spaced from all other dots.

33. (New) The method of claim 29, wherein the delivery substrate includes an ingestible media.

34. (New) A method of controlling a dissolution rate of a bioactive agent, the method comprising:

applying a first drop of solution carrying the bioactive agent at a first location on a delivery substrate;

selecting a second location on the delivery substrate for placement of a second drop of solution carrying the bioactive agent, the second location being selected to overlap the first location sufficiently to achieve a desired surface-to-mass ratio of a resulting dot pattern; and

positioning the second drop of solution at the selected second location on the delivery substrate to achieve the resulting dot pattern.